Recycling 102

In Recycling 101, you learned what recycling is, why you should recycle and how recycling works.

Well, how are we doing in South Carolina? What are the state's recycling and waste reduction goals? What are the recycling numbers? What's the recycling rate?

Those should be easy questions to answer, right? Well, nothing is easy. Not even the measuring and reporting of the recycling rate and numbers. Here are two things to remember. First, there are all kinds of waste. Second, no matter how many kinds of waste there are, there is a total amount of waste generated.

South Carolina – like all states – measures many kinds of waste. But the state's recycling rate is measured only from the total amount of municipal solid waste (MSW) generated.

What is MSW? MSW has many definitions throughout the nation. In South Carolina, however, MSW is defined as the combined residential, institutional and business waste generated that includes but is not limited to paper, cans, food scraps, yard trimmings and packaging. It does not include, for example, any industrial processing or manufacturing waste. What's that? It's the scrap material left after products are made.

What is South Carolina's current recycling rate?

The amount of MSW generated in fiscal year (FY) 2003 (July 1, 2003 – June 30, 2003) was 4.57 million tons according to the S.C. Solid Waste Management Annual Report for FY 2003. Of this amount, 1.31 million tons were recycled resulting in a recycling rate of 28.79 percent for the state.

It is the third straight year that the state's recycling rate has been about 29 percent overall. Still, the rate

is among the top 15 in the nation according to "Biocycle" magazine (January 2004 edition).

Overall, South Carolinians recycled on average 1.75 pounds of material per person per day (p/p/d).

How does South Carolina compare nationally? The amount of MSW generated nationwide was 229.2 million tons in 2001 (the latest numbers available) according to the U.S. Environmental Protection Agency (U.S. EPA). Of that amount, about 68 million tons (about 30 percent) were recycled. Americans recycled on average about 1.3 p/p/d.

Where do the 'numbers' come from to determine the state's recycling rate?

The S.C. Solid Waste Policy and Management Act of 1991 (Act) requires county governments to report annually to the S.C. Department of Health and Environmental Control (DHEC) the amount of MSW generated within their county and what happened to it – whether it was recycled or disposed of in a MSW landfill or an incinerator. DHEC also receives reports from MSW landfills, transfer stations and incinerators.

What are South Carolina's recycling and waste reduction goals?

The Act originally set a statewide recycling goal of 25 percent and a goal of reducing the amount of waste disposed of at MSW landfills and incinerators by 30 percent. Both rates are calculated by weight. Both goals were measured from the **total** amount of waste generated – not just MSW. Both goals were measured using FY 1993 numbers as a baseline and were to be met by FY 1997. Both goals were met.

The Act was amended in October 2000 to reflect new recycling and waste reduction goals. The recycling

goal was changed to 35 percent of the MSW stream is to be met by FY 2005. The waste reduction goal was changed to a goal to reduce the amount of MSW disposed of to 3.5 p/p/d – also to be met by FY 2005.

By comparison, the U.S. EPA's recycling goal for the nation is to recycle 35 percent of the MSW generated by 2005 and reduce MSW disposed of to 4.3 p/p/d by 2005.

How are we doing? In FY 2003, South Carolinians disposed of an average of 4.35 p/p/d. How does that number compare to the national average? According to the 2001 figures compiled by the U.S. EPA, Americans disposed of an average of 3.1 p/p/d.

Banned Items

Several items are not allowed to be disposed of in MSW landfills and must be recycled according to the Act. The items are large appliances, car and truck and other lead-acid batteries, tires, used motor oil and yard trimmings. In addition, land-clearing debris is not allowed to be disposed of in a MSW landfill. Land-clearing debris must be either composted or disposed of in a land-clearing or construction and demolition debris landfill.

Used Oil Recycling

Used oil is not part of MSW and as such is measured separately. No matter how it is measured, South Carolina has one of the nation's top and most comprehensive used oil recycling programs targeting do-it-yourself (DIYers) oil changers. In 2003 (the latest year figures were available), DIYers recycled more than 1.1 million gallons of used oil, the fifth consecutive year more than 1 million gallons were collected. Overall, DIYers have recycled more than 10 million gallons of used oil since 1990. In addition, DIYers recycled 187 tons of used oil filters and more than 48 tons of used oil bottles in 2003.

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What was recycled in South Carolina?

FY 2003 (measured in tons - MSW only)

Glass	9,430
Metal	507,198
Paper/Paperboard	372,526
Plastic	16,328
Banned Items ¹	308,484
Miscellaneous ²	104,153
TOTAL	1,318,119

- Banned items include appliances, lead-acid batteries, waste tires, yard trimmings and land-clearing debris. While used oil also is a banned item, it is not considered MSW and is measured separately.
- Miscellaneous items include antifreeze, electronics, cooking oil, fluorescent bulbs, food waste (post-consumer only), hazardous household materials, latex paint, mattresses, textiles, used oil filters and bottles, wood packaging, other wood (such as furniture and cabinets) and other non-packaging products.

SOURCE: S.C. Solid Waste Management Annual Report for FY 2003

South Carolina's Recycling Rate

(calculated by weight - MSW only)

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FY 1998	31.8 percent
FY 1999	31.2 percent
FY 2000	31.4 percent
FY 2001	28.9 percent
FY 2002	28.7 percent
FY 2003	28.7 percent
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South Carolina's Recycling Totals

(measured in tons - MSW only)

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FY 1998	1,314,825
FY 1999	1,171,268
FY 2000	1,408,591
FY 2001	1,262,165
FY 2002	1,262,331
FY 2003	1,318,119
SOURCE: S.C. Solid Wests Management Apply	Deport for EV 2003

SOURCE: S.C. Solid Waste Management Annual Report for FY 2003



Office of Solid Waste Reduction and Recycling 1-800-768-7348

www.scdhec.gov/recycle

DHEC's Office of Solid Waste Reduction and Recycling FYIs provide general information on environmental topics. Readers are encouraged to reproduce this material. For more information about solid waste issues, please call **1-800-768-7348** or visit our Web site at **www.scdhec.gov/recycle**. Please send written correspondence to: DHEC's Office of Solid Waste Reduction and Recycling, 2600 Bull Street, Columbia, SC 29201.